Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Revision of the Commission's	)	
Rules to Ensure Compatibility	)	CC Docket No. 94-102
with Enhanced 911 Emergency	)	
Calling Systems	)	
	)	

COMMENTS OF AT&T WIRELESS SERVICES, INC.

Pursuant to the Public Notice released July 31, 2001,[1/] AT&T Wireless Services, Inc. ("AWS") hereby submits its comments in support of the petition for waiver of the Phase II E911 rules filed by Verizon Wireless.[2/] Like AWS and many other wireless carriers, Verizon Wireless has learned that Phase II deployment consistent with the Commission's timelines is nearly impossible given the current state of Phase II location technologies. Verizon Wireless's waiver request underscores the problems that carriers face if they rely upon vendor claims about the availability and accuracy of their solutions, and demonstrates that the Commission should not rely on similar claims as it evaluates requests for waivers of its Phase II E911 rules.

Verizon Wireless's request also reinforces that there is a direct relationship between accuracy performance, channel width, and the air interface in question, i.e., more accurate results can be obtained on a CDMA system with 1,200 kilohertz channels than on systems using narrower channels like TDMA (20 kilohertz). As the Commission considers each carrier-

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1/ See Public Notice, WTB Seeks Comment on Wireless E911 Phase II Waiver Request Filed by Verizon Wireless, CC Docket No. 94-102 (rel. July 31, 2001).

2/ Verizon Wireless Updated Phase II E911 Report and Request for Limited Waiver, filed July 25, 2001 ("Verizon Wireless Petition").

specific waiver request, it should make individual determinations about what is acceptable accuracy performance given the potential of each air interface.

DISCUSSION

Generally, the Commission's rules may be waived when there is good cause shown and when "special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest."[3/] In the context of the Phase II E-911 rules, the Commission has recognized that there may be instances where "technology-related issues" or "exceptional circumstances" make it impossible for a wireless carrier to deploy Phase II by October 1, 2001, and individual waivers could be granted in these circumstances.[4/] The Commission indicated that a request for such a waiver of the Phase II implementation rules should be "specific, focused and limited in scope, and with a clear path to full compliance."[5/]

Applying these standards, the Commission granted a Phase II waiver to VoiceStream Wireless. The Commission found that VoiceStream's proposal could offer "significant public safety benefits" by immediately providing a level of accuracy and reliability greater than that provided under Phase I, while also ensuring the rapid initial deployment of ALI capability, with a relatively brief transition to even more precise levels of accuracy.[6/] The Commission also found that VoiceStream had satisfied the "special circumstances" requirement because the Network Software Solution/Enhanced Observed Time Difference of Arrival ("NSS/E-OTD")

3/ Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Fourth Memorandum Opinion and Order, 15 FCC Rcd 17442, ¶ 43 (rel. Sept. 8, 2000) ("Fourth MO&O") (citing Northeast Cellular Telephone Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990) and WAIT Radio v. FCC, 418 F.2d 1153, 1159 (D.C. Cir. 1969)).

4/ Id. at ¶ 43.

5/ Id. at ¶ 44.

6/ Id. at ¶¶ 57-60.

approach it proposed to use "may be the only ALI solution available in the near term for GSM carriers."[7/]

Verizon Wireless now makes an equally compelling case for a waiver of the Phase II E911 rules. Specifically, Verizon Wireless requests a limited waiver to permit it to deploy a network-assisted Global Positioning System/Advanced Forward Link Trilateration ("AGPS/AFLT") handset solution for its CDMA wireless network on a timeline different than that required by the Commission's rules.[8/] Like VoiceStream, Verizon Wireless has provided a detailed explanation of the technology-related issues and special circumstances that support its waiver request.

As Verizon Wireless explains, it initially planned to deploy a network-based Phase II location solution.[9/] Verizon Wireless expended great effort and expense to develop and test network-based technology, but learned -- despite vendor claims to the contrary -- that a network-based solution for its CDMA system would not be sufficiently accurate in rural areas or available in time to satisfy the Commission's Phase II requirements.[10/] Based on all available information, Verizon Wireless determined that the AGPS/AFLT handset solution would provide the best and most ubiquitous location capability for its network while presenting fewer of the problems that surfaced with the network technology.[11/]

In order to deploy the AGPS/AFLT solution, however, Verizon Wireless requires a waiver of the Phase II deadlines. First, Verizon Wireless's network vendors -- Lucent, Nortel

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7/ Id. at ¶ 56.

8/ Verizon Wireless Petition at 1.

9/ Id. at 3.

10/ Id. at 3, 31-37.

11/ Id. at 3, 36-37.

and Motorola -- will not be able to provide the necessary network upgrades in time for Verizon Wireless to provide Phase II service in response to the earliest PSAP requests.[12/] In addition, Verizon Wireless' handset vendors, Samsung, Audiovox, Nokia, Motorola, and LG, cannot provide Phase II capable handsets in sufficient time for Verizon Wireless to comply with the Commission's Phase II timelines.[13/]

Verizon Wireless nevertheless has provided a clear path to full compliance with the Commission's rules. In markets using Lucent switches, Verizon Wireless proposes to begin deploying the network-assisted portion of AGPS/AFLT by October 1, 2001; in markets using Nortel switches, Verizon will begin deploying AGPS/AFLT by January 1, 2002; and in markets utilizing Motorola switches, Verizon will begin deploying AGPS/AFLT by November 1, 2002.[14/] Verizon Wireless plans to complete deployment of these network upgrades by April 1, 2002 for Lucent markets; August 1, 2002 for Nortel markets; and March 1, 2003 for Motorola markets.[15/] Under this schedule, Verizon Wireless will upgrade its networks in all of its markets regardless of whether a PSAP request is received.[16/]

With regard to the Commission's handset requirements, Verizon Wireless will begin selling AGPS/AFLT Phase II-compliant handsets in December 2001.[17/] Verizon Wireless will ensure that 25 percent of all new handsets activated will be location-capable by July 31, 2002; 50 percent of all new handsets activated will be location-capable by March 31, 2003; and 100

12/ Id. at 4, 20-25.

13/ Id. at 4, 13.

14/ Id. at 4, 21, 27.

15/ Id. at 5, 21, 27.

16/ Id. at 5, 21.

17/ Id. at 5, 14.

percent of all new handsets activated will be location-capable by December 31, 2003.[18/] Verizon Wireless also commits to meet the 95 percent milestone for its embedded subscriber base by December 31, 2005.[19/]

Verizon Wireless also plans to pursue two interim improvements, separate and apart from deploying AGPS/AFLT, that will provide network-based location information to PSAPs for many of its subscribers until AGPS/AFLT is deployed.[20/] First, Verizon Wireless will complete the installation of an interim network-based hardware technology in certain counties where PSAPs have requested Phase II service and Verizon has been able to test network technology components.[21/] Using this technology will provide interim location capability in certain major metropolitan areas earlier than the Commission's rules for network-based solutions currently require. Verizon Wireless will also continue to evaluate available network software enhancements that will accommodate legacy CDMA handsets. One such technology -- Enhanced Forward Link Triangulation ("EFLT") -- has demonstrated in preliminary tests that it can locate callers on average between 250-300 meters, without the use of a modified handset. If further tests prove successful, Verizon Wireless will deploy EFLT in addition to AGPS/AFLT in markets with Lucent and Nortel switches.

The public safety benefits of granting Verizon Wireless's waiver are clear. The AGPS/AFLT solution will promote public safety by allowing Verizon Wireless to provide more accurate location information to PSAPs than would be possible using the network-based

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18/ Id. at 5, 14, 20.

19/ Id. at 5, 14, 20.

20/ Id. at 6, 10-11, 27-30.

21/ Id.

solutions it pursued.[22/] Although network-based technology may become generally available from vendors in about the same time frame as the AGPS/AFLT solution, nationwide deployment of a network-based solution could not be achieved until much later.[23/] The longer deployment time for network-based solutions is a result of the need to install hardware at every individual cell site and to obtain necessary zoning or other approvals for such sites.[24/] The superior accuracy and quicker nationwide deployment of AGPS/AFLT clearly make it the most appropriate solution for Verizon Wireless's CDMA network.

22/ Id. at 3-4.

23/ Id. at 36-37.

24/ Id. at 36.

CONCLUSION

Because Verizon Wireless has demonstrated exceptional circumstances that satisfy the requirements for a waiver of the Phase II E911 implementation rules, its request for waiver should be granted.

Respectfully submitted,

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